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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
PEREZ, ANGELICA

ART UNIT	PAPER NUMBER
2684	

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.		Applicant(s)
	09/870,497		SHORTY, PETER
	Examiner		Art Unit
	Angelica M. Perez		2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 June 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11-31* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☒ Claim(s) *10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claims 10 and 14 are objected to under 37 CFR 1.75(c) as being in improper

form because of multiple dependence on claims 7 and 9 and 2 and 12, respectively.

See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the

merits.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the
United States before the invention thereof by the applicant for patent, or on an international application
by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2.   Claim 23 is rejected under 35 U.S.C. 102(e) as being anticipated by Hulme

(Hulme, Peter John; Pub. No.: 2002/0,097,165 A1).

Regarding claim 23, Hulme teaches of a controller for controlling devices in an automation system (figure 1, item 10, lines paragraphs 0014 and lines 1-4 of the abstract), the controller comprising (figure 2): a radio frequency transmitter for transmitting signals (figure 2, item TX; page 1, paragraph 0009), a radio frequency receiver for receiving signals (figure 2, item RX; paragraph 0009), a memory for storing data representing a controller identifier identifying the controller and storing data representing a device table holding device identifiers of devices controlled by the controller (page 4, paragraph 0065; where the predetermined list corresponds to device table) (figure 2, item MEM and page 1, paragraph 0008, lines 6-8), a processing unit for administering the reception and transmission of signals and being adapted to read data from and store data in the memory (page 1, paragraph 0008, lines 14-16), where the processing unit of the controller comprises means for generating a first signal for instructing a first device to discover other devices within its range (page 1, paragraph 0011, lines 1-11; where the first signals are the control signals), the first signal comprising the device identifier of the first device as a destination identifier, a list of device identifiers from the device table (page 1, paragraph 0011, lines 1-11; where the "control codes" correspond to "identifiers"), and instructions to the first device to generate and transmit signals to the devices from the list for determining which devices from the list can be reached from the first device (page 1, paragraph 0011, lines 1-11 and page 4 paragraph 0065; where it is know in the art that radio signals will be of reach as long as no major obstructions stand on the way).

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1, 7-8, 15, 20-21 and 24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Hulme (Hulme, Peter John; Pub. No.: 2002/0,097,165 A1) in view of

Jacobson (Jacobson, James E. Jr.; Pub. No.: 2001/0,043,245 a1).

Regarding claims 1, 15 and 20, Hulme teaches of an automation system and

method (figure 1, lines paragraphs 0014 and 0043) for controlling and monitoring

devices in a network comprising (lines 1-4 of the abstract figure 1, where items 20,30

and 40 comprise a network of devices): a controller comprising (figure 2): a radio

frequency transmitter for transmitting signals (figure 2, item TX; page 1, paragraph

0009), a radio frequency receiver for receiving signals (figure 2, item RX; paragraph

0009), a memory for storing data representing a device table (page 4, paragraph 0065;

where the device apparatus corresponds to device table) holding device identifiers of

device controlled by the controller (figure 2, item MEM and page 1, paragraph 0008,

lines 6-8), a processing unit for administering the reception and transmission of signals

and being adapted to read data from and store data in the memory (page 1, paragraph

0008, lines 14-16), where the processing unit of the controller comprises means for

generating a first signal for instructing a first device to discover other devices within its

range (page 1, paragraph 0011, lines 1-11; where the first signals are the control

signals) the first signal comprising the device identifier of the first device as a destination identifier and at least some device identifiers from the device table (page 1, paragraph 0011, lines 1-11; where the "control codes" correspond to "identifiers"), and where the processing unit of the first device of the plurality of devices comprises means for: upon receiving the first signal with its identifier as destination identifier, generating second signals for each device identifier in the first signal (page 1, paragraph 0011, lines 12-16) each second signal comprising a device identifier form the first signal as destination identifier and the device identifier of the first device as source identifier (page 1, paragraph 0011, lines 12-16), acknowledging the reception of a second signal by generating a third signal comprising the source identifier of the received second signal as destination identifier and a destination identifier of the received second signal as source identifier (page 1, paragraph 0011, lines 26-36) and upon receiving a third signal with its identifier as destination identifier, storing data representing the source identifier of the third signal in its memory (page 1, paragraph 0011, lines 23-25). Hulme also teaches of a plurality of devices to be controlled (lines 1-4 of the abstract), each device comprising: a radio frequency receiver for receiving signals (figure 1, items 20, 30 and 40; page 1, paragraph 0009), a radio frequency transmitter for transmitting signals (figure 1, items 20, 30 and 40; page 2, paragraph 0033), a processing unit for administering the reception and transmission of signals and being adapted to read data from and store data in the memory (page 2, paragraph 0037).

Hulme does not specifically teach of a memory for storing data representing a device identifier identifying the device and storing other data.

In related art concerning wireless remote control systems, Jacobson teaches of a memory for storing data representing a device identifier identifying the device and storing other data (figure 2, item 206; page 2, paragraph 0024).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Hulme's memory for storing data with Jacobson's identifier identification of the device in order to have a more organized control of the device for faster identification of the same in future reference).

Regarding claim 7 and 20, Hulme in view of Jacobson teaches all the limitations of claim 1 and 15. In addition, Hulme teaches where the means for generating the first signal is adapted to generate the first signal to the first device in response to a predetermined action (page 1, paragraph 0011, lines 23-25).

Regarding claims 8 and 21, Hulme in view of Jacobson teaches all the limitations of claim 7 and 20. Hulme also teaches of the predetermined action (page 1, paragraph 0011, lines 23-25), where the processing unit of the controller is further adapted to add devices (page 5, paragraph 0078, lines 15-19). Lee further teaches of the table to add items or devices (column 10, lines 39-48; where the updating of "nodes" corresponds to adding devices to the system or network).

Regarding claim 24, Hulme teaches of a device to be controlled by a controller in an automation system comprising a plurality of devices (figure 1, items 20, 30 and 40; paragraphs 0014 and 0043), the device comprising: a radio frequency receiver for

receiving signals figure 1, items 20, 30 and 40; page 1, paragraph 0009), a radio frequency transmitter for transmitting signals (figure 1, items 20, 30 and 40; page 2, paragraph 0033), a processing unit for administering the reception and transmission of signals and being adapted to read data from and store data in the memory (page 2, paragraph 0037), where the processing unit of the first device of the plurality of devices comprises means for: upon receiving the first signal with its identifier as destination identifier, generating second signals for each device identifier in the first signal (page 1, paragraph 0011, lines 12-16) each second signal comprising a device identifier form the first signal as destination identifier and the device identifier of the first device as source identifier (page 1, paragraph 0011, lines 12-16), acknowledging the reception of a second signal by generating a third signal comprising the source identifier of the received second signal as destination identifier and a destination identifier of the received second signal as source identifier (page 1, paragraph 0011, lines 26-36) and upon receiving a third signal with its identifier as destination identifier, storing data representing the source identifier of the third signal in its memory (page 1, paragraph 0011, lines 23-25). Hulme also teaches of a plurality of devices to be controlled (lines 1-4 of the abstract), each device comprising: a radio frequency receiver for receiving signals (figure 1, items 20, 30 and 40; page 1, paragraph 0009), a radio frequency transmitter for transmitting signals (figure 1, items 20, 30 and 40; page 2, paragraph 0033), a processing unit for administering the reception and transmission of signals and being adapted to read data from and store data in the memory (page 2, paragraph 0037).

Hulme does not specifically teach of a memory for storing data representing a device identifier identifying the device and storing other data.

In related art concerning wireless remote control systems, Jacobson teaches of a memory for storing data representing a device identifier identifying the device and storing other data (figure 2, item 206; page 2, paragraph 0024).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Hulme's memory for storing data with Jacobson's identifier identification of the device in order to have a more organized control of the device for faster identification of the same in future reference).

3.   Claims 2-6, 11-13, 17-19, 22, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hulme in view of Jacobson as applied to claims 1 and15 above, and further in view of Lee (lee et al., US patent No.: 5,247,380).

Regarding claim 3, Hulme in view of Jacobson teaches all the limitations of claim 1.

Hulme in view of Jacobson does not teach where the memory of the controller is further adapted to store data representing a most used entry point list and where the processing unit of the controller further comprises means for forming and storing a most used entry point list in the memory by registering the number of successfully and failed transmitted signals from the controller to each device in the network, the most used entry point list indicating the device identifiers of the devices with which the controller regularly communicates.

In related art concerning infrared communication networks, Lee teaches of teach where the memory of the controller is further adapted to store data representing a most used entry point list (column 5, lines 10-22) and where the processing unit of the controller further comprises means for forming and storing a most used entry point list in the memory by registering the number of successfully and failed transmitted signals from the controller to each device in the network (column 9, lines 64-67), the most used entry point list indicating the device identifiers of the devices with which the controller regularly communicates (columns 9 and 10, lines 59-68 and 1-24; where the most used entry is determined by the adder, e.g., successful entries tallied).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Hulme's and Jacobson's automation system with Lee's routing table in order to achieve a shorter and faster route to deliver the signals so that the performance of the system can be improved).

Regarding claims 2 and 16, Hulme in view of Jacobson teaches all the limitations of claim 1 and 15. Lee further teaches where the memory of the controller is further adapted to store data representing a routing table (column 10, lines 59-67), where the processing unit of any device of the plurality of devices further comprise means for generating a fourth signal comprising the identifier of the controller as destination identifier (column 10, lines 36-39), stored data representing the source identifiers of any received third signals, and the device identifier of the first device as a source identifier, and where the processing unit of the controller further comprises means for receiving fourth signals for the device to be controlled and forming the routing table indicating

each of the plurality of devices (column 10, lines 59-67 and figure 2A), other devices
which each device can successfully transmit signals to and receive signals from (figure
2A, items 92, 74, 76, 94).

Regarding claim 4, Hulme in view of Jacobson teaches all the limitations of claim
3. Lee further teaches where the most used entry point list comprises device identifiers
for one or more devices in the network and a counter related to each device identifier in
the list (column 13, lines 29-34), the giving an indication of the number of successful
transmission to the related device (column 9, lines 64-68).

Regarding claims 5 and 18, Hulme in view of Jacobson teaches all the limitations
of claim 4 and 17. Lee also teaches where the means for forming the most used entry
point list is adapted to, in case of a transmission to a device in the most used entry point
list, increase the counter related to the device if the transmission is successful (columns
9 and 10, lines 66-68 and 1-3, respectively) and to decrease the counter related to the
device if the transmission fails (column 9, lines 64-66), and where the means for forming
the most used entry point list is further adapted to, in case of a transmission to a device
which is not in the most used entry point list, include the device in the most used entry
point list if the transmission is successful (column 10, lines 39-44).

Regarding claims 6 and 19, Hulme in view of Jacobson teaches all the limitations
of claim 2 and 16. Lee further teaches where the memory of the controller is further
adapted to store data representing a preferred repeater list (column 2, lines 39-42) and
where the processing unit of the controller further comprises a routine for analyzing the
routing table to form a preferred repeater list indicating one or more devices which

together can route a signal from any device in the routing table to any other device in the routing table and store the preferred repeater list in the memory of the controller (columns 9 and 10, lines 59-68 and 1-10, respectively).

Regarding claim 11, Hulme and Jacobson teach all the limitations of claim 1. Lee further teaches where the first signal comprises all device identifiers from the device table, except the device identifier of the first device (column 9, lines 59-64; where the destination addresses correspond to the other devices and not to the device itself).

Regarding claim 12, Hulme and Jacobson teach all the limitations of claim 1. Lee also teaches where each of the plurality of devices further comprise means for providing an output to, or receiving an input from, an appliance operationally connected to the device, where the processing unit of the controller further comprises means for generating a fifth signal comprising at least one destination identifier corresponding to a device identifiers of a destination device, information related to the operation of the destination device or the appliance connected to the destination device, and repeater identifiers corresponding to one or more signal repeating devices, and where one or more of the plurality of devices are further adapted to act as signal repeating devices in that the processing units of each of the one or more devices comprise means for, upon reception of a fifth signal, processing the information in its processing unit if the at least one destination identifier corresponds to the device identifier of the device, and means for, upon reception of a fifth signal, transmitting a sixth signal holding the at least one destination identifier and the information if one of the one or more repeater identifiers corresponds to the device identifier of the device (column 2, lines 39-42; where the fifth

and sixth signals correspond to a source and destination address of the devices adapted as repeaters).

Regarding claim 13, Hulme in view of Jacobson and in further view of Lee teaches all the limitations of claim 12. Lee further teaches where all devices are adapted to act as repeaters (column 2, lines 39-42; where the fifth and sixth signals correspond to a source and destination address of the devices adapted as repeaters).

Regarding claim 17, Hulme and Jacobson teach all the limitations of claim 15. Lee further teaches where the memory of the controller is further adapted to store data representing a most used entry point list (column 5, lines 10-22) and where the processing unit of the controller further comprises means for forming and storing a most used entry point list in the memory by registering the number of successfully and failed transmitted signals from the controller to each device in the network (column 9, lines 64-67), the most used entry point list indicating the device identifiers of the devices with which the controller regularly communicates (columns 9 and 10, lines 59-68 and 1-24; where the most used entry is determined by the adder, e.g., successful entries tallied) and where the most used entry point list comprises device identifiers for one or more devices in the network and a counter related to each device identifier in the list (column 13, lines 29-34), the giving an indication of the number of successful transmission to the related device (column 9, lines 64-68) and to decrease the counter related to the device if the transmission fails (column 9, lines 64-66).

4.   Regarding claim 22, Hulme and Jacobson teach all the limitations of claim 20. In addition, Lee teaches where the processing unit of the controller further comprises

means for, adding devices to and removing devices from a group, where a device is virtually mark a device in the memory of the first processing unit when it is removed from a group (column 9, lines 59-68; column 10, lines 39-44; where when the nodes are installed but out of service suggest a virtual mark). Smith further teaches where each device controlled by the controller is comprised in one or more groups of devices (figure 1; column 4, lines 18-25), each group comprising at least one device (figure 1, items 17, 19, 21, 23, 25 and 27), and where the processing unit of the controller further comprises means for adding devices to and removing devices from a group, where a device is virtually marked when it is removed from a group, and where the addition of a device to a group is a predetermined action if the added device is virtually marked.

Regarding claim 25, Hulme teaches of a method for routing signals in an automation system network (figure 1, lines paragraphs 0014 and 0043) for controlling and monitoring devices comprising (lines 1-4 of the abstract figure 1, where items 20,30 and 40 comprise a network of devices): a plurality of devices to be controlled (lines 1-4 of the abstract), a controller comprising a memory storing data representing a controller identifier identifying the controller, other devices which each device can successfully transmit signals to and receive signals from (figure 1, items 20, 30 and 40; page 2, paragraph 0037), and a processing unit for administering the reception and transmission of signals and being adapted to read data from and store data in the memory (page 2, paragraph 0037), the method comprising the steps of: transmitting a first signal from the controller to a specified device at least once, the signal comprising the identifier of the specified device as a destination identifier (page 1, paragraph 0011,

lines 1-11; where the "control codes" correspond to "identifiers"), if the first signal is received by the specified device, transmitting an acknowledgement signal from the specified device to the controller (page 1, paragraph 0011, lines 12-16), Further, Jacob teaches device comprising a memory storing data representing a device identifier identifying the device and a processing unit for administering the reception and transmission of signals (figure 2, item 206; page 2, paragraph 0024), In further art, Lee teaches of storing data representing a routing table indicating for each of the plurality of devices (column 9, lines 59-64), and storing data representing a most used entry point list (column 5, lines 10-22) being an ordered list indicating the device identifiers of the number, N, of devices that have the highest transmission success counter corresponding to the number of successful transmission from the controller to a device minus the number of failed transmissions from the controller to the device (column 9, lines 64-67), if no acknowledgement signal is received by the controller, then choosing the first device from the most used entry point list as a first repeating device (figure 4A, items 308, 312, 316, 318 and 322; where the most used entry point list corresponds to the available, successful repeaters), determining a route to the specified device in the routing table, the route using one or more repeating devices, the first of which is the first repeating device (figure 2A, where different routes can be determined), transmitting a second routed signal from the controller at least once, the signal comprising the identifier of the specified device as a destination identifier and the identifiers of the one or more repeating devices from the route determined in step D as repeater identifiers, transmitting a routed acknowledgement signal from the specified device to the controller

upon reception of the routed second signal (column 6, lines 4-13; where the retransmission of the signal corresponds to the second signal), as long as no routed acknowledgement signal is received by the controller from the specified device, then repeating steps D, E, and F for N-1 times using the second, third Nth device from the most used entry point list as a first repeating device (column 6, lines 4-13; where the retransmission will follow a different path each time and utilizing different repeaters each time).

Regarding claim 26, Hulme in view of Jacobson in further view of Lee teaches all the limitations of claim 25, Lee further teaches where the memory of the controller further stores data representing a preferred repeater list (column 5, lines 10-22) indicating one or more devices which together can route a signal from any device in the routing table to any other device in the routing table (figure 2A; where the routing table can follow any of the paths described), and where the method further comprises the steps of (columns 9 and 10, lines 59-68 and 1-10, respectively): if no routed acknowledgement signal of the Nth second routed signal is received by the controller from the specified device, then choosing the first device from the preferred repeater list that is not in the most used entry point list as a first repeating device (figure 4A, items 308, 312, 316, 318 and 322; column 10, lines 40-44; where nodes that were unavailable become available), determining a route to the specified device in the routing table, the route using one or more repeating devices (figure 2A), the first of which is the first repeating device (figure 2A), transmitting a second routed signal from the controller, the

signal comprising the identifier of the specified device as a destination identifier and the identifiers of the one or more repeating devices from the route determined in step H as repeater identifiers (column 6, lines 4-13; where the retransmission of the signal corresponds to the second signal), transmitting a routed acknowledgement signal from the specified device to the controller upon reception of the routed second signal (column 6, lines 4-13; where the retransmission of the signal corresponds to the second signal), and as long as no routed acknowledgement signal is received by the controller from the specified device, then repeating steps H, I, and J for each device in the preferred repeater list using the corresponding device from the preferred repeater list as a first repeating device (column 6, lines 4-13; where the retransmission will follow a different path each time and utilizing different repeaters each time).

Regarding claim 27, Hulme in view of Jacobson in further view of Lee teaches all the limitations of claim 25, Hulme further teaches where the processing units of each of the plurality of devices are further adapted to provide an output to, or receive an input from, an appliance operationally connected to the device, the method further comprising the steps of (page 2, paragraph 0037): transmitting a third signal from the controller, the third signal comprising at least one destination identifier corresponding to the identifier device or destination controllers (page 1, paragraph 0011, lines 23-25). Lee further teaches of a destination information related to the operation of a device or an appliance connected to a device, and one or more repeater identifiers corresponding to device identifiers one or more signal repeating devices, receiving the third signal at one of the plurality of devices, if the at least one destination identifier corresponds to the device

identifier of the receiving device, then processing the information in the processing unit of the device, and if one of the one or more repeater identifiers correspond to the device identifier of the receiving device, then transmitting a fourth signal holding the at least one destination identifier and the information (column 6, lines 4-13; where the retransmission will follow a different path each time and utilizing different repeaters each time).

Regarding claim 28, Hulme in view of Jacobson in further view of Lee teaches all the limitations of claim 27. Hulme also teaches where the third signal is transmitted by the controller (page 1, paragraph 0011, lines 29-30), the at least one destination identifier comprised in the third signal is a device identifier (page 1, paragraph 0011, lines 29-30 and pages 3 and 4, paragraph 0059; where the codes correspond to the destination/source identifiers) and where the information comprised in the third signal comprises instructions to a processing unit of the destination device to provide an output to, or receive an input from, the appliance connected to the destination device (page 2, paragraph 0022).

Regarding claim 29, Hulme in view of Jacobson in further view of Lee teaches all the limitations of claim 27. Lee also teaches where the third signal is transmitted by a device, wherein the at least one destination identifier comprised in the third signal is a controller identifier, and wherein the information held by the third signal is related to a state or a reading of the device transmitting the third signal (page 1, lines 31-34; where the second reference control is a device).

Regarding claim 30, Hulme in view of Jacobson in further view of Lee teaches all the limitations of claim 27. Lee also teaches the step of, upon receiving a third or a fourth signal at a device or a controller, generate and transmit a first acknowledgement signal having the identifier of the device or controller transmitting the third or fourth signal as destination identifier (column 6, lines 15-28; where the third and fourth signals are generated during the retransmissions).

Regarding claim 31, Hulme in view of Jacobson in further view of Lee teaches all the limitations of claim 30. Lee further teaches where the first acknowledgement signal comprises a destination identifier and one or more repeater identifiers, the method further comprising the steps of receiving said first acknowledgement signal at a device and if one of the one or more repeater identifiers correspond to the device identifier of the receiving device, then transmitting a second acknowledgement signal holding said destination identifier (column 6, lines 15-28; where the identifiers correspond to destination/source addresses).

5.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hulme in view of Jacobson and Lee as applied to claims 1 and above, and further in view of Smith (Smith et al., US Patent No.: 6,192,282 B1).

Regarding claim 9, Hulme and Jacobson teach all the limitations of claim 1. Lee further teaches where the processing unit of the controller further comprises means for, adding and removing devices to/from groups is adapted to virtually mark a device in the memory of the first processing unit when it is removed from a group (column 9, lines 59-

68; column 10, lines 39-44; where when the nodes are installed but out of service suggest a virtual mark).

Hulme in view of Jacobson and in further view of Lee do not teach where each device controlled by the controller is comprised in one or more groups of devices to be collectively controlled, each group comprising at least one device.

Smith, in related art concerning building automation teaches where each device controlled by the controller is comprised in one or more groups of devices to be collectively controlled (figure 1; column 4, lines 18-25), each group comprising at least one device (figure 1, items 17, 19, 21, 23, 25 and 27).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Hulme in view of Jacobson in further view of Lee automation system with Smith's groups of devices collectively controlled in order to add convenience and greater automation to the system.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Angelica Perez whose telephone number is 703-

305-8724. The examiner can normally be reached on 7:15 a.m. - 3:55 p.m., Monday -

Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for

the organization where this application or proceeding is assigned are 703-872-9314 for

regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the TC 2600's customer service number is 703-306-

0377.

NAY MAUNG
SUPERVISORY PATENT EXAMINER

Angelica Perez
(Examiner)

Nay A. Maung
(SPE)

Art Unit 2684

March 18, 2004